

Response

Application No. 10/702,431

Attorney Docket No. 032032

AMENDMENTS TO THE DRAWINGS

The attached replacement sheets of drawings include changes to Fig. 4 regarding reference characters.

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REMARKS

Claims 1-7 are pending in the application. By this Amendment, claim 1 has been amended. No new matter has been added by this Amendment. It is submitted that this Amendment is fully responsive to the Office Action dated June 5, 2007.

Drawings

On page 2, item 3 of the Action, the drawings are objected to as failing to show Fig. 4 elements as described in the specification.

This objection is traversed. It is respectfully submitted that such errors have been corrected by the present Amendment.

Claim Objection

(a) On page 3, item 4 of the Action, claim 7 is objected to as being in improper form because of a multiple dependent claim 6.

This objection is traversed. It is submitted that claim 7 is a proper dependent claim. Specifically, 37 CFR 1.75 provides that:

A multiple dependent claim shall not serve as a basis for any other multiple dependent claim.

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In other words, a multiple dependent claims cannot depend from another multiple dependent claim (see MPEP 608.01(n)).

Although claim 6 is a multiple dependent claim, claim 7 is not a multiple dependent claim. Therefore, claim 7 is a proper dependent claim.

Accordingly, it is requested to withdraw this objection at this time.

(b) On page 3, item 5 of the Action, claims 1-7 are objected to as lacking antecedent basis for the term “the screen.”

This objection is traversed. It is respectfully submitted that such errors have been corrected by the present Amendment.

Claim Rejections - 35 U.S.C. §101

Claims 1-7 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

This rejection is respectfully traversed.

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Specifically, the Examiner asserts that the language of the claims raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful and tangible result to form the basis of statutory subject matter under 35. U.S.C. §101 (see page 4, item 7 of the Action).

However, it is submitted that the present claimed invention produces a concrete, useful and tangible result.

Specifically, as described in the “DESCRIPTION OF THE RELATED ART” section of the specification, the conventional flow chart format has disadvantages such as:

- no state of a high degree process can be detected;
- it is not suitable for the steady operation (steady monitoring operation) in which the operating situation is monitored by repeatedly executing the same processing;
- there is a case in which a process is temporarily stopped and the processing is interrupted in the confirming operation of a message and at an error generating time; and
- the intermediate interruption of the processing was one of causes unsuitable for the steady operation (page 6, line 18 to page 7, line 2 of the specification).

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On the contrary, the present claimed invention produces a control of the logic chart format description in which all parts are operated within one period of the executing period of the control and no processing is intermediately interrupted. Namely, the repeating operation is performed every assigned executing period in accordance with a described wiring order (page 9, lines 20-25 of the specification). Therefore, the logic chart format can be described for the purpose of the steady monitoring operation. Further, the application range as a plant operation efficiency improvement supporting package can be widened since the definition can be performed by the same working operation and the same sense as the conventional flow chart format (page 10, lines 18-24 of the specification).

Therefore, it is again submitted that the present claimed invention produces a concrete, useful and tangible result of the control of the logic chart format description which makes the steady monitoring operation possible without intermediate interruption of any processing.

Next the Examiner also asserts that claims 1-7 presented as a machine claims that support a plant operation by transmitting and receiving data between the plan operation supporting device and a process controller through a communication bus and it appears that all elements or features of the claimed subject matter of the plant operation device could be implemented in software alone; therefore, claims are directed towards a non-statutory subject matter since they are not tangible.

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However, MPEP 2106 provides that:

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing.... “[A]n application of a law of nature or mathematical formula to a ... process may well be deserving of patent protection.” *Diehr*, 450 U.S. at 187, 209 USPQ at 8 (emphasis added); see also *Corning*, 56 U.S. (15 How.) at 268, 14 L.Ed. 683 (“It is for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted . . .”). In other words, the opposite meaning of “tangible” is “abstract.” (emphasis added)

In other words, the tangible requirement does not necessarily mean that a claim must be tied to a particular machine or apparatus and if the invention produces a beneficial result, the tangible requirement is satisfied.

As described above, the present claimed invention produces a concrete, useful and tangible result. Therefore, it is submitted that the tangible requirement is satisfied by the present claimed invention.

In addition, while the Examiner asserts that all elements or features of the claimed subject matter of the plant operation device could be implemented in software alone, the claimed feature of display means recites a structural limitation of “a screen of the display means.”

Therefore, the display means of the present claimed invention cannot be implemented in software alone.

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Moreover, it is respectfully requested to show, by indicating a corresponding portion of MPEP or applicable case law, for example, a rule or legal precedence upon which the Examiner relies to support her position that if all elements or features of the claimed subject matter of the plant operation device could be implemented in software alone, claims are directed towards a non-statutory subject matter.

Claim Rejections - 35 U.S.C. §102

Claims 1-7 are rejected under 35 U.S.C. §102(e) as being anticipated by Burd et al. (USP 6,961,750).

This rejection is respectfully traversed. Claim 1, now amended recites (a) “display means for displaying a working operation procedure described in a logic chart format on a screen of the display means” and (b) “executing means for executing the support of the plant operation in accordance with the working operation procedure of the logic chart format displayed on the screen.”

It is respectfully submitted that Burd et al. is completely silent about the above claimed features.

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Claim feature (a)

First, the Examiner's ground of anticipation of the feature (a) is based on the Abstract, Fig. 5 and the description of column 1, line 30 to column 2, line 15 (page 5, lines 2-3 of the Action). However, these parts of Burd et al. do not disclose the feature (a) as discussed below.

The Abstract of Burd et al. merely provides an explanation of server-side control object which processes and generates a client-side user interface element and which may be a hierarchy of server-side control objects.

With regard to the hierarchy of server-side control objects, Burt et al. provides a calendar configuration as an example of the hierarchy of the server-side control object. This configuration includes a month control object which hierarchically contains multiple week control objects each of which also hierarchically contains seven day control objects (see column 3, lines 41-45).

Also, this hierarchy is directed to improve an encapsulation of server-side processing (column 3, lines 30-32).

Therefore, it is submitted that Burt et al. discloses the mere hierarchical configuration of control objects.

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On the contrary, in the present claimed invention, the display means displays a **working operation procedure described in a logic chart format** on a screen of the display means.

The **logic chart format** is described, for example, in Fig. 4 and its corresponding description (page 8, lines 8-13). As described, the logic chart format provides a basis for a logical operation such as logical OR, logical AND.

It is submitted that the mere hierarchical configuration of control objects is completely different from the logical operation such as logical OR, logical AND.

Therefore, the Abstract of Burt et al. is completely silent and different from the claimed feature (a) “display means for displaying a working operation procedure described in a logic chart format on a screen of the display means.”

Second, Fig. 5 of Burd et al. merely describes an internal system of a general purpose computer device (see column 13, lines 45-54).

Therefore, Fig. 5 of Burt et al. is completely silent and different from the claimed feature (a) “display means for displaying a working operation procedure described in a logic chart format on a screen of the display means.”

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Third, the description of column 1, line 30 to column 2, line 15 of Burt et al. merely provides a **general explanation of Web browsing scheme**. Specifically, it explains how to download static web pages by using URL and HTML (column 1, lines 30-63) and how to display dynamic web pages (column 1, line 64 to column 2, line 15).

The **general explanation of Web browsing scheme** is completely silent regarding the feature (a) “display means for displaying a **working operation procedure described in a logic chart format** on a screen of the display means.”

Therefore, it is submitted that Burd et al. is completely silent and unrelated to the claimed feature (a) “display means for displaying a working operation procedure described in a logic chart format on a screen of the display means.”

Claim feature (b)

Next, the Examiner’s ground of anticipation of the feature (b) is based on Abstract, Figs. 2, 5 and the description of column 1, line 30 to column 2, line 15, and column 4, lines 6-20 (page 5, line 6 of the Action). However, these parts of Burd et al. do not disclose the feature (b) as discussed below.

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The claimed feature (b) recites “executing means for executing the support of the plant operation **in accordance with the working operation procedure of the logic chart format** displayed on the screen.”

In other words, in the present claimed invention, the support of the plant operation is executed **in accordance with the working operation procedure of the logic chart format**.

As discussed above, the Abstract, Figs. 5 and the description of column 1, line 30 to column 2, line 15 of Burt et al. are completely silent and unrelated to **the working operation procedure of the logic chart format**.

In addition, Fig. 2 of Burt et al. illustrates a flow of operations for processing and generating client-side user interface elements using server-side control objects (column 6, lines 56-58).

However, each step described in Fig. 2 is completely silent regarding the claimed feature (b) “executing means for executing the support of the plant operation **in accordance with the working operation procedure of the logic chart format** displayed on the screen.”

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Next, column 4, lines 6-20 of Burt et al. describes a hierarchy of server-side control objects. However, as discussed above, the mere hierarchical configuration of control objects is completely different from the logical operation such as logical OR, logical AND.

Particularly, in the present claimed invention, the support of the plant operation is **executed in accordance with the working operation procedure of the logic chart format.**

Therefore, it is submitted that column 4, lines 6-20 of Burt et al. is completely silent and different from the feature (b) of the present claimed invention.

Accordingly, it is submitted that Burt et al. is completely silent regarding the feature (b) “executing means for executing the support of the plant operation in accordance with the working operation procedure of the logic chart format displayed on the screen.”

In view of the above, it is submitted that Burt et al. does not disclose or fairly suggest the claimed feature of (a) “display means for displaying a working operation procedure described in a logic chart format on a screen of the display means” and (b) “executing means for executing the support of the plant operation in accordance with the working operation procedure of the logic chart format displayed on the screen,” as called for in amended claim 1.

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Accordingly, claim 1 is not anticipated by Burt et al.

Claims 2-7 are directly or indirectly dependent from claim 1 and recites the additional features set forth therein. Accordingly claims 2-7 are not anticipated by Burt et al. for the reasons set forth above.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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